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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,546	12/09/2003	Alexander B. Morgan	62227A	4549

109 7590 10/01/2004

THE DOW CHEMICAL COMPANY
INTELLECTUAL PROPERTY SECTION
P. O. BOX 1967
MIDLAND, MI 48641-1967

EXAMINER

TRAN, THAO T

ART UNIT PAPER NUMBER

1711

DATE MAILED: 10/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/731,546	Applicant(s) MORGAN ET AL.
	Examiner Thao T. Tran	Art Unit 1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/21/04, 3/17/04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 2-3 are indefinite due to the use of "copolymer blend". It is unclear to the examiner if this is a polycarbonate-ABS copolymer or a blend of polycarbonate and ABS. If Applicants mean to indicate this as a blend of polycarbonate and ABS, please state so.

Clarification of the "copolymer blend" is required.

Claim 11 recites the limitation "the plastic substrate" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Remark

3. The examiner is interpreting the "copolymer blend" in claims 2-3 as the blend of polycarbonate and ABS.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3 and 5-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Asai et al. (US Pat. 4,639,379).

In regards to claims 1-3, Asai teaches an article, comprising a polymeric substrate containing a flame retardant; wherein the surface of the substrate is subjected to a plasma treatment to form a plasma-polymerized surface film containing an organosilicon compound. The polymeric substrate made of polycarbonates, styrene-acrylonitrile-butadiene copolymer, or a blend thereof (see col. 2, ln. 18-64; col. 3, ln. 3).

In regards to claims 5-6, Asai further teaches the substrate is subjected to a surface pretreatment by plasma in the presence of aniline (nitrogen-containing) or nitrogen to form a crosslinked layer (see col. 7, ln. 21-26; col. 10, ln. 6-7).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Asai as applied to claim 1 above.

Asai is as set forth in claim 1 above and incorporated herein.

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Although Asai teaches the substrate subjected to a plasma treatment to form a plasma-polymerized surface film containing an organosilicon compound after a surface pretreatment by plasma not including an organosilicon compound, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to employ an organosilicon compound in the pretreatment would have improved the adhesion of the coating containing an organosilicon compound to the substrate.

8. Claims 4, 8-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asai as applied to claims 1-3 and 5 above, and further in view of Jeong et al. (US Pat. 6,476,105).

Asai is as set forth in claims 1-3 and 5 above and incorporated herein.

Asai does not teach a specific type of flame retardant.

In regards to claims 4 and 8-15, Jeong teaches a resin composition comprising a mixture of ABS and polycarbonate and phosphorous-containing flame retardant, such as triphenyl phosphate (see paragraph bridging col. 2-3; col. 3, ln. 62-67). Jeong further teaches the flame-retardants to be 0.5-3 parts by weight (see col. 4, ln. 2).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have used the flame retardant, as taught by Jeong, in the invention of Asai. This is because Jeong teaches that using phosphorous-containing flame-retardants would have enhanced coating adhesion, and at this weight range would have optimized coating adhesion.

In regards to claim 16, the Asai combination does not teach the use of the composite as an enclosure for an electronic device as recited in the instant claim. However, it has been known within the skill in the art that laminates comprising a thermoplastic resin substrate with an

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abrasive and flame resistant coating have been used as covering of these devices. And it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have used the composite taught by the Asai combination as a protective covering of these device, due to its high weatherability and abrasive and flame resistance.

Contact Information

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 571-272-1080. The examiner can normally be reached on Monday-Friday, from 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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September 30, 2004


THAO T. TRAN
PATENT EXAMINER